AHRI PERFORMANCE CERTIFICATION PROGRAM FOR COMMERCIAL FURNACES

FORM CFRN-WT3
FACILITY AND EQUIPMENT QUESTIONNAIRE

Participant’s Company Name:

Location:

1. What is the operating range of this facility? Name: ________________________________
   (a) Capacity, BTU/HR
       Minimum _______  Maximum _______
   (b) Power Supply:
       60 Hz, 3φ
       Volts _______  _______  _______
       Max. Amps _______  _______  _______
       50 Hz, 3φ
       Volts _______  _______  _______
       Max. Amps _______  _______  _______

2. How long does it take for you to install a unit for test (fully instrumented)?
   Man-Hours  _______  _______
   Persons  Hours

3. How long does it take you to conduct a complete test series (Thermal Efficiency),
   start to finish, including calculations?
   Man-Hours  _______  _______
   Persons  Hours

4. How many shifts per day shall you employ for the AHRI witness testing? _______

5. What type of equipment do you use for measuring inlet and outlet temperatures?
   Describe __________________________________________________________
   Frequency instrument is calibrated? _____________________________
   Is the primary standard traceable to NIST? ___________________________

6. Type of gas flow measuring instruments do you use?
   (a) Diaphragm/bellows meters________________________
7. Type of equipment used for measuring oil flow rate?
   (a) Scale
       Frequency instrument is calibrated? 
       Is the primary standard traceable to NIST?
   (b) Burette
       Frequency instrument is calibrated? 
       Is the primary standard traceable to NIST?

8. Type of instrument used to determine Higher Heating Value?
   (a) Gas Calorimeter
   (d) Gas Chromatograph
   (c) Standard Hydrometer
       Frequency instrument is calibrated? 
       Is the primary standard traceable to NIST?

9. Type of equipment do you use for Combustion Gases (CO, CO2) levels?
   Describe
       Frequency instrument is calibrated? 
       Is the primary standard traceable to NIST?

10. Type of equipment used for measure gas pressure?
    a. Pressure Gage
       Frequency instrument is calibrated? 
       Is the primary standard traceable to NIST?
b. Manometer

Frequency instrument is calibrated? _____________

Is the primary standard traceable to NIST? _____________

11. Type of equipment used for measure gas/oil temperature?

a. Thermometer

Frequency instrument is calibrated? _____________

Is the primary standard traceable to NIST? _____________

b. Thermocouple Probe

Frequency instrument is calibrated? _____________

Is the primary standard traceable to NIST? _____________

12. Type of instrument(s) used to determine voltage and current?

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Analog Meter</td>
<td>______</td>
</tr>
<tr>
<td>(b) Digital Meter</td>
<td>______</td>
</tr>
<tr>
<td>(c) Transducers</td>
<td>______</td>
</tr>
<tr>
<td>(d) Other</td>
<td>______</td>
</tr>
</tbody>
</table>

Frequency instrument is calibrated?
Voltmeter ____________________________
Ammeter ____________________________

Is the primary standard traceable to NIST?
Voltmeter ____________________________
Ammeter ____________________________

13. Describe data acquisition system and data obtained.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
14. Method to determine the barometric pressure?

_________________________________________________________________

(a) Barometer at site (at level of test)

_________________________________________________________________

(b) Commercial weather information (radio, phone)

_________________________________________________________________

(c) Other

_________________________________________________________________

15. Is a regulated voltage supply available for the test unit?

Yes _______  No _______

16. If not "regulated," shall the voltage stay within the allowable tolerance of Commercial Furnace Program – Test Protocol during the testing?  Yes _______  No _______

(Describe): ____________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Complied by: _______________________________

Date: _______________________________